

Differences in EFL learners' burnout levels and receptive language skills with regard to the mindfulness-based instruction

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Abstract

The main aim of education is to provide students with academic knowledge and skills. In this process, some students experience burnout, which negatively affects their productivity and effectiveness. This study experimentally examines the impact of mindfulness-based instruction on burnout and students' achievement in receptive language skills among 64 learners of English as a foreign language (EFL) via a mixed-methods approach (QUAN→ qual) within a single framework. The techniques implemented in the experimental group, i. e. 32 participants, included *observance of all experience, analyzing, planning, judging, reasoning, and fantasizing* (van Vreeswijk et al., 2014). Furthermore, the techniques were inspired by Pirson et al. (2012) conceptualization that mindfulness comprises novelty producing, novelty seeking, engagement, and flexibility. The results of posttest revealed these techniques efficiently enhanced the above-mentioned variables.

Keywords: : EFL learners; mindfulness-based intervention; burnout.

1. Introduction

Universal Declaration of Human Rights has formally recognized education as a human right in 1948 (UNICEF, 2007). Education as a guidance empowers humans to know how to face failure, to get success in their life, and to stand on their own feet. A good education makes them acquire new skills, techniques and knowledge so as to provide opportunities for personal, pro-

fessional, social, and economic development. In today's era, most people across the world are educated by others especially their parents and teachers. This education by a teacher has a profound impact on students' life as they are enabled to analyse circumstances while making decisions for their life, to expand their vision and outlook to see the world.

Burnout, as one of the highly prevalent problems in education, precludes students from achieving their academic objectives. Students experience burnout when they overwork for long periods of time, when they lack control of the situation, and when they have little or no passion for the work or a reason to continue. In recent years, researchers have given considerable attention to the burnout syndrome and their research studies have been conducted in almost every field, and even in non-occupational samples, for example students (Yang, 2004). Previous research demonstrated that students hold the middle to high rank of the burnout scale among nurses, counsellors, and educators. (Malakh-Pines et al., 1981).

At the beginning of the school year, most students start with a lot of enthusiasm, eager to acquire new knowledge and skills, while their materials, and teachers are still new and exciting. As the academic year progresses, they lose their interest due to a load of homework, after-school activities, and tests that they sometimes cannot accomplish in one day. This is why they experience burnout. McCarthy et al. (1990) maintain that the students with burnout feel exhausted because of study demands, have a cynical and detached attitude towards their study, and feel incompetent as a student. According to Maslach (1976), student burnout syndrome manifests in emotional exhaustion, depersonalization, and low personal accomplishment because of the course stress, course load, or other psychological factors. This results in high absenteeism, low motivation to do course work, high percentage dropout, and the like, which are the outcomes of student burnout (Meier & Schmeck, 1985).

Due to the importance of student burnout (Maslach et al., 2001), teachers should identify the signs of burnout and use effective toolkits to solve this problem and to enhance their teaching. In this study, it is presumed that mindfulness-based techniques can be among the strategies teachers have at their disposal to enhance students' attention, engagement, and interest, and, accordingly, to reduce the risk of burnout. Mindfulness as the other variable considered in the present study comprises four dimensions, including novelty seeking, novelty producing, flexibility and engagement (Pirson et al., 2012). Novelty seeking is the attribute that makes students curious and open toward the environment and themselves. Novelty producing enables students to create novel categories, with innovation and creativity, rather than relying on prior categorizations. Flexibility enables them to consider experiences from different perspectives, which leads to more adaptation to the

environment. Engagement helps them have the outlook toward an active interaction with the environment, when noticing bigger and subtler details and changes in social/environmental context (Pirson et al., 2012).

By promoting mindfulness in classrooms, teachers can prevent burnout, which affects students' health not just today, but for the rest of their lives and may even be passed on to future generations. The present research aims to address the influence of mindfulness-based instruction on burnout and receptive (reading and writing) language skills achievement among students learning English as a foreign language.

2. Review of the Related Literature

2.1. *Mindfulness*

Mindfulness considered as an organizationally relevant social psychological concept (Albert, 1990) has two main approaches. The Eastern approach to mindfulness, closely related to the practice of meditation and westernized by Professor Jon Kabat-Zinn, focuses on present-based attention and a non-evaluative perspective (Kabat-Zinn, 2011). The Western approach to mindfulness which was developed by social psychologist Ellen Langer defines mindfulness as the process of drawing novel distinction. This perspective encompasses three contexts of individuals: external, material, and social (Langer, 1989). Langer (1989) suggested that, in this socio-cognitive approach to mindfulness, a person actively engages in creating novel categories and distinctions due to her/his open mindset towards novelty.

In the social-cognitive approach to mindfulness, novel distinction and appreciation of novelties result in an active mindset in which people are contextually and environmentally sensitive, are in the present moment, notice big and subtle changes, welcome novelties, construct new categories for structuring perception, and have behaviour guided but not governed by rules and routines (Langer & Moldoveanu, 2000). A mindful individual has an alert state of all mental contents that consists of perceptions, sensations, cognitions, and emotions (Walach et al., 2006) and makes changes in their feelings and their behaviour about a given situation (Langer, 1990). When such individuals pursue this learning agenda that could be very goal-oriented, they present multiple perspectives nonjudgmentally resulting in enhancing problem solving and other cognitive exercises (Langer, 1989) and reducing the need for prior established categories, thereby fostering their open mind (Langer, 1992).

Mindfulness enhances attention to, and awareness of experiences taking place in the present moment (Kabat-Zinn, 2013). Awareness refers to an

ability that makes individual capable of monitoring the inner and outer environment and context constantly, in other words, it is the background radar of consciousness (Brown & Ryan, 2003). On the other hand, attention refers to an ability that helps individual in the process of having focus of consciousness on her/his limited experience (Brown & Ryan, 2003). As such, mindfulness can be seen as a state of openness, reception, and non-evaluation of mind (Kabat-Zinn, 1990). Pirson et al. (2012) explicitly stated that attention and awareness underlie engagement, one of the principal sub-factors of mindfulness. The higher level of mindfulness, the higher likelihood of flow experiences (Csikszentmihalyi, 1996), and the more meaningful personal engagement will be (Alexander & Langer, 1990).

The mindful individuals with flexible mindsets present multiple perspectives of distinctions/ categories in the present moment rather than adhering to a single perspective of categories drawn in the past (Langer, 2009). Mindfulness helps to act non-automatically, not to be oblivious to context or perspective (Langer, 2009), to reduce automaticity and habitual actions to what arises in the mind, and to allow for much more responses (Kabat-Zinn, 1990). Mindlessness, by contrast, follows routinized and automatic behaviour that has an effect on the decision-making process since it prevents people from responding with an open mind (Langer, 2009). It could inhibit intuition, creativity, and reception of novel information and perspectives (Langer, 2009). Langer (2009) emphasized that mindfulness is a result of developing the constant repetition of mindsets of categories, associations, and habits of thought during childhood and academic years.

Hayes & Feldman (2004) reported that mindfulness-based interventions reduce anxiety via raising awareness in the present moment and focusing on favourable intrinsic and extrinsic incentives. To Carbonero (as cited in Franco et al., 2011), anxiety depreciates academic attainment since it is a direct outcome of concentrating attention on negative emotions and perceptions about one's ability to succeed, rather than focusing on the task at hand. Generally, mindfulness-based interventions have been found to have a facilitative role in academic performance and general wellbeing (Hall, 1999).

2.2. Burnout

Maslach & Jackson (1986) presented the most widely used definition of burnout. These authors described burnout as a syndrome of three states of emotional exhaustion, depersonalization, and reduced personal accomplishment. When some researchers such as Freudenberger (1974, 1975) and Maslach and her colleagues (Maslach, 1976; Pines & Maslach, 1978) introduced the burnout construct, burnout has become a popular subject over the years. This popularity led to the development of burnout instruments; for

example, the MBI (Maslach Burnout Inventory) questionnaire has three subscales: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion refers to the feeling of depletion or draining of one's emotional resources, considered as the essential individual stress component of the syndrome (Maslach, 1998). Depersonalization, which refers to the development of negative, callous, and cynical outlook towards other people at work, is regarded as the interpersonal component of burnout (Maslach, 1998). Reduced personal accomplishment referring to the tendency to the negative evaluation of one's work and to the decline in one's competence and productivity, represents the self-evaluation component of burnout (Maslach, 1998).

Like Maslach & Jackson (1986), the study by Pines & Aronson (1988) suggests that burnout refers to a state of physical, emotional, and mental exhaustion that a person displays when one involves in situations for a long time that are emotionally demanding. Physical exhaustion refers to reduced energy and chronic fatigue, weakness, and various physical and psychosomatic complaints. Emotional exhaustion refers to the feeling of hopelessness, helplessness, and entrapment. Mental exhaustion represents a negative outlook towards an individual's self, work, and life (Pines & Aronson, 1988). Burnout leads to the tendency to low commitment, absenteeism, reduced productivity, and low morale (Cordes & Dougherty, 1993).

There are two classifications of burnout: 1) active burnout, which is associated with external variables and 2) passive burnout, which is related to internal variables (Gillespie, 1982). Development of active burnout has been related to the existence of environmental factors and an external locus of control like family members (Meyer, 1982). The existence of internal struggles that are often developed from unresolved personal and/or work issues can contribute to development of passive burnout. Leiter & Maslach (1988) suggest that development of burnout occurs sequentially in three distinctive phases such as emotional exhaustion, depersonalization, and negative beliefs about personal accomplishments.

Sofield & Juliano (2000) offered a somewhat different approach presuming that burnout develops in four stages. Individuals in the initial stage are stressful, forgetful, persistently irritable and anxious, and are incapable of concentrating (Girdin et al., 1996). In the second stage of burnout, they have tardiness for work, procrastination, or are late in completing their work assignments (Girdin et al., 1996). The main characteristic of the third stage of burnout is that they suffer from the underlying depression (Sofield & Juliano, 2000). During the final stage of burnout, the terminal cynicism becomes evident in which they are unable to accept help and assistance from others, especially friends or loved ones, so that they usually need specialized professional help (Sofield & Juliano, 2000). In educational domain, it has been

revealed that burnout can affect various dimensions of students' academic performance, including cognitive, emotional, behavioural, and motivational (Ghanizadeh & Jahedizadeh, 2015). Thus, this study suggests that the impacts of mindfulness-inspired instruction among EFL learners can reduce burnout and enhance language achievement.

3. Method

3.1. Design of the study

This quasi-experimental research was conducted in a mixed-method approach and the data collection was carried out in two quantitative and qualitative phases. The mix-method approach was used in order to enhance reliability and validity.

In the study, the following research questions were investigated:

1. Does mindfulness-based instruction influence EFL learners' burnout?
2. Does mindfulness-based instruction influence EFL learners' receptive skills (reading and writing)?

3.2. Participants

Since there were two phases in data collection, the two sets of participants are described separately as follows.

3.2.1. Participants of the quantitative phase

Sixty-four Iranian EFL students participated in this study (47 females and 17 males) with the mean age of 32 years. They had all been studying English at the intermediate levels about six hours a week in a private language institute in Mashhad, a city in the Northeast of Iran. They were divided into four equal groups, i.e., two experimental ones (23 females and 9 males) and two control ones (24 females and 8 males). The study included 16 Iranian EFL learners in each of the two experimental groups who were given special, mindfulness-based tasks and 16 Iranian EFL learners in each of the two control groups. The students did a pretest in order to ensure that the students were homogenous in their English proficiency level. Furthermore, in order to ensure participants' homogeneity in burnout level, all participants were asked to respond to the burnout questionnaire prior to the task.

3.2.2. *Participants of the qualitative phase*

In the second phase, five students of the experimental group were interviewed to see whether and how the innovative mindfulness training influenced their burnout and their language achievement.

3.3. *Instruments*

For collecting data, a language test and the following questionnaire were used in this study.

3.3.1. *The test of the International English Language Testing System (IELTS)*

IELTS is recognized as one of the most reliable and standardized English means of testing people's English language ability for study, work, and travel. It examines four areas of language competence: Listening, Reading, Writing, and Speaking. IELTS scores for each of these four skills are reported on a nine-band scale and moreover, IELTS provides an Overall Band Score from 1 to 9 calculated by averaging these four scores and rounding. There are the same Listening and Speaking tests for all candidates, whereas a candidate chooses Reading and Writing tests based on whether s/he is taking the Academic or General Training module. In the present study, two areas of language competence, Listening and Reading were tested. The Listening section lasts approximately 40 minutes and this test has four sections, 10 questions each. The Reading test includes three sections with 40 questions and candidates spend 60 minutes on it. These tests were selected from Tests of Cambridge IELTS 14 General Training: Authentic Practice Tests. The testing procedure does not require specialists to administer it. In order to avoid any subjective view in rating the participants' language competence, so the researchers opted to test Listening and Reading as the students get to choose between the answers that are already offered. Although the other two skills were practiced in this course, due to the problems associated with rating the participants' Speaking and Writing skills, only the scores of the receptive skills were included in the analysis.

3.3.2. *Maslach Burnout Inventory Student-Survey (MBI-SS)*

The researchers utilized the Persian version of Maslach Burnout Inventory Student Survey (MBI-SS) designed and validated by Schaufeli et al. (2002) for assessing EFL student burnout. This scale that has 15 items gauging three dimensions of burnout: (1) emotional exhaustion, (2) cynicism, and (3) academic efficacy. These items are measured on a 7-point Likert-type scale

connected with the notations ranging from 1 ("always") to 7 ("never") as represented in Table 1 (See Appendix B). In the present study, the Persian version of the scale – translated and validated by Rostami et al. (2014) – was used. The scale revealed acceptable reliability indices ranging from 0.84 to 0.90. In the present study, the reliability of the inventory estimated via Cronbach's alpha was found to be .78.

Table 1: Items of the Maslach Burnout Inventory–Student Survey

Factors	Sample Item
Emotional exhaustion	I feel emotionally drained by my studies.
Cynicism	I have become less interested in my studies since my enrollment at the school.
Academic Efficacy	I can effectively solve the problems that arise in my studies.

3.4. Procedure

In this study, the quantitative and qualitative methods were used.

3.4.1. Mindfulness-based intervention

In the first phase, a quasi-experimental design was utilized and conducted in four equal groups. In the first step, to ensure that they were homogenous regarding their proficiency level, participants were asked to answer the Listening and Reading sections of IELTS test. In the second step, for collecting the data, the aforementioned questionnaire, MBI-SS, was distributed among the participants of the four classes after giving the instruction and making the meaning of the items clear for them. Also, they were assured that their responses and views would be kept anonymous and confidential. They cooperated with the researcher voluntarily, answered, and filled them out once at the beginning of the term and then at the end of the term. Furthermore, all of them received a candy and tea in an attempt to ensure a relaxing and cooperative atmosphere between answering the IELTS test and filling the questionnaire. They spent approximately 120 minutes on the IELTS test and the questionnaire. Students spent approximately three months studying English at the intermediate level in the period between July 2019 and September 2019. They six hours / three days a week.

The four classes were taught by the same teacher. Since the main purpose of this study was to investigate the impact of mindfulness-based training on

learners' burnout and their receptive language skills, this intervention, as a set of classroom techniques, was conducted in the experimental groups and the results were compared with those of the control groups in which mindfulness was not instructed. In this study, the mindfulness-based techniques were drawn from the following principles: the *observance of all experience* such as perception of senses, thoughts, and feelings, and *permission for all experience* that includes 1) behaviours, 2) behavioural urges (avoidance behaviour, distraction seeking), and 3) thoughts like analyzing, planning, judging, fantasizing, and reasoning without automatic reaction to it (van Vreeswijk et al., 2014).

In this model, focusing and guiding attention is a precondition. It aims to retain consciousness, which can be displayed in the form of thinking or feeling. What is important here is a stable and sustained attention and the detection of distraction.

The second constituent of the model is developing an approachable and tolerant attitude toward thinking, emotions, and reactions. Segal et al. (2013) called this attitude the *doing mode*, which automatically arises when an incongruity between our current state and a desired state is detected. In this situation, we try to seek for explanations; concurrently, we attempt to look for solutions for the resultant anxiety. In academic settings, the doing mode includes analyzing, judging, evaluating, solving, assessing, planning, adjusting, and goal setting. The *doing mode* is more suitable for practical, procedural, and intellectual tasks, although it is commonly used to cope with emotional issues, as well.

When emotions are involved, the *being mode*—which is somehow the reverse of the *doing mode*—is used. The *being mode* is non-judgmental and accepting (Segal et al., 2013). Hence, in the present study, attending to the learners' affective domain and familiarizing them with the detection and management of their emotional state were key strategies in promoting their mindfulness and the resultant academic achievements.

The procedure was inspired by the Pirson et al.'s (2012) operationalization of the four central components of mindfulness: novelty seeking, novelty producing, flexibility and engagement. Overall, the implemented mindfulness-based techniques are displayed in Figure 1.

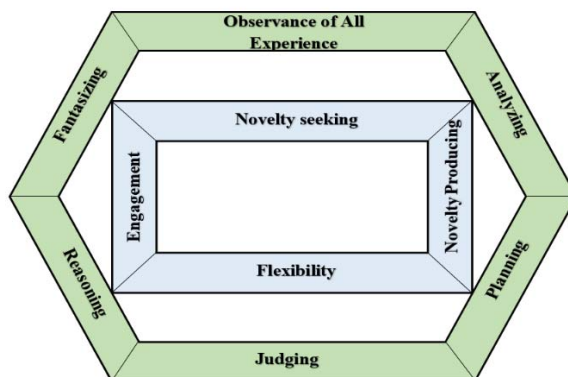


Figure 1: The implemented mindfulness-based techniques, adapted from Vreeswijk et al. (2014: 17).

1) *Observance of all experience*: Most materials the researchers used were YouTube videos in English. The focus was on one-minute motivational and one-minute daily conversation videos. The main reason why English motivational videos were selected was to help students focus on the present experience and prevent their minds and feelings from wandering in the past or the future. As Lyddy and Good (2017) remarked, mindfulness shifts the state of mind from *doing* or *driven mode* to *being mode*. Via *doing mode*, mind drifts to the future and past time, whereas in *being mode*, their mind is retained in the present moment. Furthermore, these English motivational videos offered students positive energy, kept them interested in practicing English and learning the relevant grammar, vocabularies, ideas and so forth so as to understand what these videos were about. Because most of these videos were one-minute motivational ones, they could keep them more concentrated and engaged. One of the examples was a video of a speech by Alexa Rose Carlin (2017) downloaded from YouTube. As they watched the video, their feelings, perceptions, and cognition were keenly involved resulting in creative and novel ideas, positive attitudes, and constructive emotions. As already stated, according to novelty seeking, one of the mindfulness sub-factors, learners are inclined to be innovative and receptive toward the context and themselves (Pirson et al., 2012). In the present study, the students were asked to articulate their emotions and ideas whilst watching the video and after watching it. Then they shared their opinions with each other and received feedback from the teacher. Having obtained all these experiences such as perception of senses, thoughts, and feelings through the observance,

the researchers proceeded with the other techniques, *analyzing*, *planning*, *judging*, *reasoning*, and *fantasizing*.

2) *Analyzing*: in this stage, the students were asked to transcribe the movie, ponder on every sentence of the text, discuss their opinions and interpretation. To facilitate the process, the researchers provided them with the required linguistic, vocabulary, and syntactic knowledge. The students were asked to do the grammar homework from Macmillan English Grammar. This caused learners to be curious, to seek novelty, and to construct new categories and distinctions. This activity is in line with Pirson et al. (2012) contention that in the novelty-producing component of mindfulness, learners tend to generate innovative and creative classifications, with innovation without necessarily relying on prior categories (Pirson et al., 2012).

3) *Planning*: The third activity required students to watch the movie again, to take notes, and write summaries. They attended to the message as well as individual words, phrases, and sentences. Following that, they generated a concept map or cluster diagram out of their notes. During the process, one of the researchers helped them in identifying the main ideas and establishing connections among ideas. This activity is consistent with the engagement component of mindfulness. It refers to active participation of individuals with themselves, the materials, and the context (Pirson et al., 2012).

4) *Judging*: At the judging stage, students were required to contemplate on the prior stage and to write an introduction on their own. Then, all students were asked to read their introduction to the classroom while other students discussed it, and finally the most effective introduction was selected by the students. This activity was expected to develop the *flexibility* component of mindfulness. Flexibility indeed empowers students in seeing the experiences from different angles and equips them to adjust more effectively to the context (Pirson et al., 2012).

5) *Reasoning*: At this stage, students were encouraged to write the body and conclusion of their writings through generating a concept map or cluster diagram. They were specifically asked to ponder on their conclusion while one of the researchers monitored and scaffolded the activity. The body and conclusions were read in the class while the others commented on them. Through this phase, the novelty producing aspect was expected to flourish.

6) *Fantasizing*: All these activities were reiterated for daily conversational movies. Furthermore, students were asked to visualize each movie and then do a role play at the fantasizing stage. They were asked to practice their role plays and to write about different aspects of the topic of films. For example, for the movie transcribed earlier in this paper, they reflected about their dreams, wrote about them, created the concept map, and acted it in the class.

The researchers used the Longman Communication 3000 as the other material. It is a list of the 3000 most frequent vocabulary items in spoken and written English. About 10 minutes out of the 90 minute-class time were devoted to teach some of these vocabulary items with some details involving meaning, pronunciation, part of speech, and collocations. Students wrote the new story in their groups at a Telegram app to receive feedback from the teacher and their classmates, and told their story in the next session in the class. In order to stimulate motivation in learning English, students were allowed to send new and favorite motivational movies to their groups and shared their emotions and feedbacks with others after watching.

Meanwhile, the control group received their listening activities by means of audio-tapes and some discussion questions. Then, the researchers taught grammar, vocabulary, collocation, colligation, and formal and informal structures, that the participants in the control group were required to know. They were asked to do the homework assigned from *Macmillan English Grammar in Context*. Also, they listened again to make some notes individually to write the summary after the teacher instructed them how to draw a semantic mapping or clustering, categorize their information based on presentation, reason and consequence, and write the case example or in-line example. Finally, they wrote and spoke in the class based on what they had listened to. Moreover, although the same vocabulary entries of the Longman Communication 3000 were taught in the experimental and control groups taking about 10 minutes out of the 90 minute- class time with some details involving meaning, pronunciation, part of speech, and some collocations, students did not write a new story based on these vocabulary units as the participants in the experimental group did. Indeed, the participants in the control group practiced some routine and mainstream activities with no exploration and discovery learning involved. In addition, no specific attempt was made to activate their concentration and engage their full attention by focusing on the present experience and impeding their minds and feelings from wandering in the past or the future.

3.4.2. Interview

In the second phase, in order to capture the quality of the mindfulness-based techniques as classroom activities and explore students' attitudes and reactions towards these techniques in the two experimental classes, the qualitative part was carried out by interviewing five participants of the experimental groups who were chosen randomly. They were asked to articulate about their experiences, and to explain whether mindfulness-based techniques had any impact on their attitudes and perceptions, and how it facilitated their learning process. The interviews were recorded and analyzed accordingly.

3.5. Data Analysis

To carry out this mixed methods study and to analyze the data in this study, the researchers took advantage of the software packages below:

SPSS (Statistical Package for the Social Sciences): After the responses collected from the questionnaires were tabulated, this software was employed for analyzing and validating the data. To compare the performance of the two groups in the variables under study, independent samples *t*-test was employed.

MAXQDA 18: This software has been designed for computer-assisted qualitative and mixed methods data, text, and multimedia analysis in academic, scientific, and business institutions developed and distributed by VERBI Software based in Berlin, Germany. This was utilized for both coding and categorizing the data from interviews. In addition, the access was given to provide different models for antecedents and consequences separately.

4. Results

4.1. The results of the quantitative phase

4.1.1. The results of the pretest

To examine the existence of any significant difference between control and experimental groups on their language proficiency level (in receptive skills), an independent samples *t*-test was used. Table 2 shows the descriptive results of proficiency test assessed via IELTS in the two groups. As the table indicates, the mean scores of proficiency in the two groups do not differ greatly: control ($M=9.91$, $SD=.82$), experimental ($M=9.94$, $SD=.80$).

Table 2: Descriptive statistics of proficiency across control and experimental groups

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Pre-IELTS	Control	32	9.91	.82	.14
	Experimental	32	9.94	.8	.14

To ascertain whether this observed difference is statistically non-significant, the results of *t*-test should be examined. As can be seen, there is not a statistically significant difference between the two groups regarding their proficiency level of receptive language skills ($t= -.15$, $p=.87$). In other words, the two groups are homogenous regarding their level of language proficiency level prior to conducting the study.

Table 3: Independent samples t-test showing the results of pretest on proficiency level

	Levene's Test for Equality of Variances				Sig. (2-Mean tailed)	Mean Difference	Std. Error Difference
	F	Sig.	t	df			
Pre- IELTS	.09	.75	-.15	62	.87	-.03	.20

Identical analysis was carried out for burnout. Table 4 displays the descriptive statistics of burnout in the pre-test. As the table reveals, the mean scores of burnout in the two groups are slightly different: control ($M=32.38$, $SD=7.41$), experimental ($M=31.13$, $SD=7.01$).

Table 4: Descriptive statistics of burnout across control and experimental groups

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Pre- Burnout	Control	32	32.38	7.42	1.31
	Experimental	32	31.13	7.01	1.24

To ensure whether this slight difference is statistically non-significant, an independent samples *t*-test was run. Table 5 presents the results of *t*-test run on burnout. As can be seen, no statistically significant difference was observed between the two groups regarding their level of burnout ($t= .69$, $p=.49$).

Table 5: Independent samples t-test showing the results of pretest on burnout

	Levene's Test for Equality of Variances				Sig. (2- tailed)	Mean Difference	Std. Error Difference
	F	Sig.	t	df			
Pre_ Burnout	.28	.59	.69	62	.49	1.25	1.80

4.1.2. The results of the posttest

To inspect the impact of mindfulness-based instruction on students' language achievement (receptive skills), an independent samples *t*-test was run. Table 6 presents the mean scores of receptive language skills across participants in control and experimental groups a: control ($M=10.31$, $SD=.47$), experimental ($M=12.47$, $SD=1.13$).

Table 6: Descriptive statistics of language achievement across control and experimental groups

	Groups	N	Mean	Std. Deviation	Std.	Error
					Mean	
Post-IELTS	Control	32	10.31	.74	.13	
	Experimental	32	12.47	1.13	.20	

These findings are also presented visually in the following bar graph (Figure 2). As the figure shows, the mean score of IELTS in experimental group is higher than that of the control group.

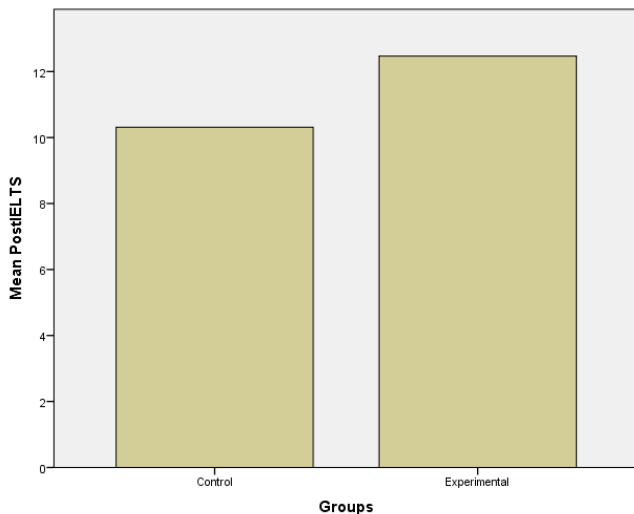


Figure 2: The mean scores of the IELTS across the two groups.

To see whether this observed difference is statistically significant, we should refer to the results of independent samples *t*-test. As can be seen in Table 7, there is a statistically significant difference between the two groups regarding the level of their receptive skills proficiency ($t= -9.00$, $p=.00$). The

effect size calculated via Cohen's *d* was found to be -2.26 which is a high magnitude according to Cohen's *d* index. In other words, the two groups are significantly different regarding their level of reading and writing achievement. This is an indication of the efficiency of the treatment employed in the experimental group.

Table 7: Independent samples t-test showing the results of posttest on language achievement

	Levene's Test for Equality of Variances		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
	F	Sig.					
Post IELTS	8.88	.00	-9.00	62	.00	-2.15	.24

To explore the role of mindfulness in burnout, another analysis was run. Table 8 exhibits the descriptive statistics of burnout in control and experimental groups after the treatment. As can be seen, the mean score of burnout is lower in experimental group in comparison with that of the control group: control ($M=36.56$, $SD=9.83$), experimental ($M=22.06$, $SD=3.48$).

Table 8: Descriptive statistics of burnout across control and experimental groups

	Groups	N	Mean	Std. Deviation	Std. Error
Post-Burnout	Control	32	36.56	9.83	1.74
	Experimental	32	22.06	3.48	.62

To have a more vivid picture of the above finding, the bar graph of the mean scores of burnout of control and experimental groups in post-test was generated. Figure 3 illustrates the bar graph. As can be seen, students in experimental group displayed lower level of burnout.

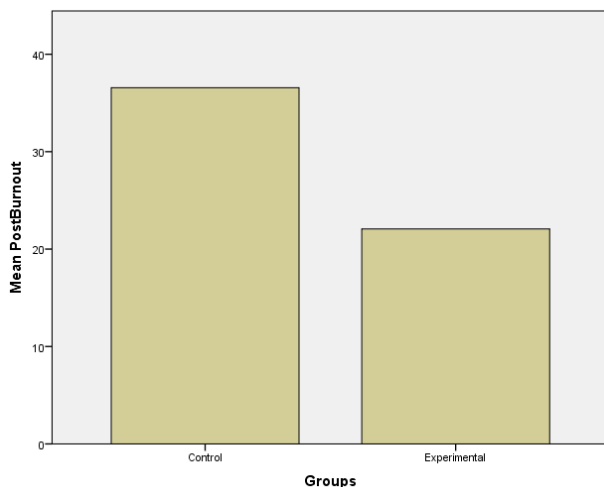


Figure 3: The mean scores of burnout across the two groups.

To examine the significance of this difference, we should consider Table 9. As can be seen, there is a statistically significant difference between the two groups regarding the level of their burnout ($t= 7.86, p=.00$). The effect size calculated via Cohen's d was found to be 1.97 which is a moderate magnitude according to Cohen's d index. It implies the efficiency of mindfulness-based technique in reducing burnout.

Table 9: Independent samples t-test showing the results of posttest on burnout

	Levene's Test for Equality of Variances				Sig. (2-tailed)	Mean Difference	Std. Error Difference
	F	Sig.	t	df			
Post-Burnout	11.77	.001	7.86	62	.000	14.50	1.84

4.2. The results of the qualitative phase

The data of the effects of mindfulness-based teaching were coded by the researchers according to the information gathered by the interviews. All data were carefully studied and classified into three basic categories of 1)

Code-ID	Position	Parent code	Code
135	40	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Becoming interested in learning English
136	34	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Not feeling tired
137	39	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not feeling tired	Constant repetition of the learned material
138	36	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not feeling tired	Continuous practice of speaking
139	38	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not feeling tired(Continuous practi...	By recording the voice
140	37	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not feeling tired(Continuous practi...	Of both accuracy and fluency
141	35	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not feeling tired	Continuous practice of writing
142	30	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Becoming motivated to learn beyond the class time
143	33	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)(Becoming motivated to learn beyo...	By teacher's encouragement
144	32	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)(Becoming motivated to learn beyo...	By watching motivational and psychological movies
145	31	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)(Becoming motivated to learn beyo...	By listening to songs to improve vocabulary and writing
146	29	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Enjoying improvements in skills and subskills
147	28	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Looking forward to the next session
148	27	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Enhancing self-satisfaction and self-confidence
149	26	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Not repeating previous mistakes
150	21	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Not giving up in difficult situations
151	25	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not giving up in difficult situations	Ready to fight any difficulty
152	24	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not giving up in difficult situations	Tolerating any pressure on the way
153	23	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not giving up in difficult situations	Becoming more and more determined
154	22	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion)Not giving up in difficult situations	Not to get disappointed
155	20	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Relating the background knowledge to the present information
156	17	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Having more concentration on
159	16	The effect of mindfulness on burnout(The effect of mindfulness on emotional exhaustion	Deletion

Figure 5: The codes and subcodes of the mindfulness-based instruction role in emotional exhaustion

Figure 5 displays all codes that can be regarded as the most significant effects of mindfulness on emotional exhaustion. These codes are ordered in the following list:

1. Becoming interested in learning English
2. Not feeling tired
 - 2.1. Constant repetition of the learned material
 - 2.2. Continuous practice of speaking
 - 2.2.1. By recording the voice
 - 2.2.2. Of both accuracy and fluency
 - 2.3. Continuous practice of writing
3. Becoming motivated to learn beyond the class time
 - 3.1. By teacher's encouragement
 - 3.2. By watching motivational and psychological movies
 - 3.3. By listening to songs to improve vocabulary and writing
4. Enjoying improvements in skills and subskills
5. Looking forward to the next session
6. Enhancing self-satisfaction and self-confidence
7. Not repeating previous mistakes
8. Not giving up in difficult situations
 - 8.1. Ready to fight any difficulty
 - 8.2. Tolerating any pressure on the way
 - 8.3. Becoming more and more determined
 - 8.4. Not to get disappointed
9. Relating the background knowledge to the present information

As the figure shows, this type of instruction had great impact on EFL students' cynicism. The codes and parent codes are depicted in Figure 7.

Code ID	Position	Parent code	Code
305	91	The effect of mindfulness on burnout/The effect of mindfulness on academic efficacy (knowing grammar)	Passive structure
306	68	The effect of mindfulness on burnout	The effect of mindfulness on academic efficacy
307	41	The effect of mindfulness on burnout	The effect of mindfulness on cynicism
308	2	The effect of mindfulness on burnout	The effect of mindfulness on emotional exhaustion
209	87	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Analysis of the words and sentences
130	66	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Exploring the association among the four skills
111	65	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Doing group work and collaborative learning
112	64	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Using peer correction
113	63	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Having question and answer exchanges
114	62	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Having equal chance to take part in class activities
115	59	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Using self-assessment
116	61	The effect of mindfulness on burnout/The effect of mindfulness on cynicism/Using self-assessment	Teacher as facilitator not the authority
117	60	The effect of mindfulness on burnout/The effect of mindfulness on cynicism/Using self-assessment	Student as problem solver not the receiver of knowledge
118	54	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Eager to continue learning
119	58	The effect of mindfulness on burnout/The effect of mindfulness on cynicism/Eager to continue learning	To become an English teacher
120	57	The effect of mindfulness on burnout/The effect of mindfulness on cynicism/Eager to continue learning	To become a translator
121	56	The effect of mindfulness on burnout/The effect of mindfulness on cynicism/Eager to continue learning	To get a high score in IELTS exam
122	55	The effect of mindfulness on burnout/The effect of mindfulness on cynicism/Eager to continue learning	To go abroad
123	53	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Positive competition
124	52	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Planning
125	51	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Watching movies with and without subtitle
126	50	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Increasing students' autonomy
127	49	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Being able to think in English
128	48	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Active participation and volunteer work
129	47	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Expressing feelings better
130	46	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Positive perceptions towards classroom activities
131	45	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Providing justification and reason for anything said
132	44	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Automatic performance of the course tasks
133	43	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Activating the mind by asking questions
134	42	The effect of mindfulness on burnout/The effect of mindfulness on cynicism	Learning faster and easier
135	40	The effect of mindfulness on burnout/The effect of mindfulness on emotional exhaustion	Becoming interested in learning English
136	34	The effect of mindfulness on burnout/The effect of mindfulness on emotional exhaustion	Not feeling bored

Figure 7. The codes and sub codes of the mindfulness-based instruction role in cynicism

Figure 7 reveals all codes that can be regarded as the most significant effects of mindfulness on cynicism. These codes are ordered in the following list:

1. Analysis of the words and sentences
2. Exploring the association among the four skills
3. Doing group work and collaborative learning
4. Using peer correction
5. Having question and answer exchanges
6. Having equal chance to take part in class activities
7. Using self-assessment
 - 7.1.1. Teacher as facilitator not the authority
 - 7.1.2. Student as problem solver not the receiver of knowledge
8. Eager to continue learning
 - 8.1. To become an English teacher
 - 8.2. To become a translator
 - 8.3. To get a high score in IELTS exam
 - 8.4. To go abroad
9. Positive competition

10. Planning
11. Watching movies with and without subtitle
12. Increasing students' autonomy
13. Being able to think in English
14. Active participation and volunteer work
15. Expressing feelings better
16. Positive perceptions towards classroom activities
17. Providing justification and reason for anything said
18. Automatic performance of the course tasks
19. Activating the mind by asking questions

The last part focused on the effect of mindfulness-based instruction on students' academic inefficacy. Figure 8 demonstrates all the effects that came into play as the result of mindfulness-based instruction.

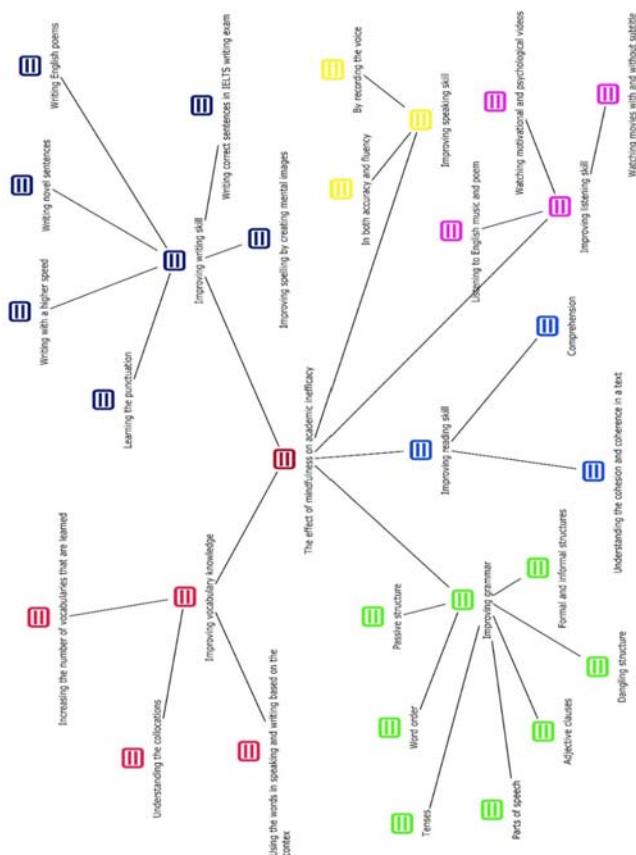


Figure 8: The model of the effects of mindfulness-based instruction on academic inefficacy

Code-ID	Position	Parent code	Code
76	1		The effect of mindfulness on burnout
77	69	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy	Improving writing skill
78	75	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving writing skill	Writing correct sentences in IELTS writing exam
79	74	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving writing skill	Writing novel sentences
80	73	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving writing skill	Writing English poems
81	72	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving writing skill	Improving spelling by creating mental images
82	71	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving writing skill	Learning the punctuation
83	70	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving writing skill	Writing with a higher speed
84	76	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy	Improving speaking skill
85	78	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving speaking skill	By recording the voice
86	77	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving speaking skill	In both accuracy and fluency
87	79	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy	Improving listening skill
88	82	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving listening skill	Listening to English music and poem
89	81	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving listening skill	Watching movies with and without subtitle
90	80	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving listening skill	Watching motivational and psychological videos
91	83	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy	Improving reading skill
92	85	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving reading skill	Comprehension
93	84	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving reading skill	Understanding the cohesion and coherence in a text
94	86	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy	Improving vocabulary knowledge
95	89	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving vocabulary knowledge	Increasing the number of vocabularies that are learned
96	88	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving vocabulary knowledge	Using the words in speaking and writing based on the context
97	87	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving vocabulary knowledge	Understanding the collocations
98	90	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy	Improving grammar
99	97	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving grammar	Formal and informal structures
100	96	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving grammar	Dangling structure
101	95	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving grammar	Adjective clauses
102	94	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving grammar	Parts of speech
103	93	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving grammar	Tenses
104	92	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving grammar	Word order
105	91	The effect of mindfulness on burnout The effect of mindfulness on academic inefficacy Improving grammar	Passive structure

Figure 9: The codes and sub codes of the mindfulness-based instruction role in academic inefficacy

As the figure illustrates, this type of instruction had great impact on EFL students' academic inefficacy. The codes and parent codes are depicted in Figure 9.

Figure 9 revealed all codes that can be regarded as the most significant effects of mindfulness on academic inefficacy. These codes are ordered in the following list:

1. Improving writing skill
 - 1.1. Writing correct sentences in IELTS writing exam
 - 1.2. Writing novel sentences
 - 1.3. Writing English poems
 - 1.4. Improving spelling by creating mental images
 - 1.5. Punctuation
 - 1.6. Writing with a higher speed
2. Improving speaking skill
 - 2.1. By recording my voice
 - 2.2. In both accuracy and fluency
3. Improving listening skill

- 3.1. Via listening to English music and poem
- 3.2. Watching movies with and without subtitle
- 3.3. Watching motivational and psychological videos
4. Improving reading skill
- 4.1. Comprehension
- 4.2. Understanding the cohesion and coherence in a text
5. Improving vocabulary knowledge
- 5.1. Increasing the number of vocabularies that are learned
- 5.2. Using the words in speaking and writing based on the context
- 5.3. Understanding the collocations
6. Improving grammar
- 6.1. Formal and informal structures
- 6.2. Dangling
- 6.3. Adjective clauses
- 6.4. Enhancement of the knowledge of parts of speech
- 6.5. Tenses
- 6.6. Word order
- 6.7. Passive structure
- 6.8. Learning faster and easier

5. Discussion

According to Vreeswijk et al. (2014), mindfulness training equips people for success in life to become fully-functioning persons of the society and, furthermore, upon the above-mentioned definition of Pirson et al. (2012), four key sub-factors of mindfulness are novelty seeking, novelty producing, flexibility and engagement. Inspired by these contentions and definitions, in the present study, the researchers conjectured that mindfulness-based intervention would have positive impacts on burnout depletion and language achievement.

To investigate the hypotheses of this study, this study utilized a quasi-experimental design among 64 EFL learners. The results of posttest showed that there was a significant difference in control and experimental groups regarding the level of their burnout under the influence of mindfulness-based techniques. In other words, the efficiency of mindfulness-based technique utilized in the experimental groups resulted in burnout depletion. The results of qualitative phase were also in line with the findings of the quantitative phase. The above finding corroborates previous research. For example, some interventions such as the Cultivating Awareness and Resilience in Education (CARE) program and the Stress Management and Relaxation Techniques (SMART)-in-Education program indicated that the regulation of concentration and awareness could reduce burnout (Jennings et al., 2011;

Roeser et al., 2013) as a three-dimensional syndrome that consists of three dimensions: emotional exhaustion, cynicism, and academic inefficacy (Schaufeli et al., 2002).

In particular, the results of this study revealed that using mindfulness-based intervention in experimental groups positively resulted in the enhancement of receptive skills. As to the influence of mindfulness-based intervention on academic achievement, several studies have reported results similar to those of this study (Hall, 1999). Hall (1999) noted that there is a growing body of scientific evidence that mindfulness-based interventions might have a major positive impact on some factors which are relevant to academic performance and general wellbeing (Hall, 1999). He also noted that these enhancements include: 1) attention, focus and concentration, 2) cognitive processing, 3) working memory and perception, and 4) emotional and social intelligence that includes emotion regulation and social, altruistic, or pro-social behaviour (Hall, 1999). Hence mindfulness makes a positive impact on students' educational performance and academic attainment by enriching attention and awareness (Baena-Extremera et al., 2021; Schoeberlein & Sheth, 2009).

The above findings are also in line with the studies reported in the field of L2 education, although these studies are quite sparse in number and extent. Takiguchi (2015) maintained that mindfulness can be an effective approach in enhancing L2 learners' language learning and promoting educators' socio-emotional competence. He proposed four one-day sessions over four to five weeks, via online or live courses. The courses include guided instructions in mindfulness mediation practices, mindful yoga, and group discussions in English. It was found that these programs not only English proficiency, but also increased natural capacity to respond more effectively to stress and burnout while enhancing awareness in everyday life and daily assignments in practicing English. In another study, Moafian et al. (2017) in an attempt to validate the Persian version of MBI-SS substantiated significant positive relationship between the Persian MBI-SS and positive affect, physical health, psychological health and environmental health among EFL learners.

In a recent book on cultivating higher order thinking skills (HOTS) in language classes, Ghanizadeh et al. (2020) introduced several techniques. One of the techniques revolves around regulation of attention and self-awareness, i.e., mindfulness-intervention procedure. It is undeniable when thinking skills are enhanced, learning, including language learning, will facilitate.

The qualitative phase demonstrated this effect through participants' verbal explanations concerning the positive role of mindfulness in their language success. For example, learners articulated that their writing skill was

improved to a large extent, in that they could create correct sentences in IELTS writing exam, novel sentences, and English poems with a higher speed and correct punctuation. This is in line with Saurel's (2017) study explaining that mindfulness improves writing through affecting the brain's neural patterns in a positive way, improving social relationships, and controlling stress (Saurel, 2017). Besides, it was revealed that mindfulness can improve students' listening and speaking skills through listening to English music and poem, watching movies with and without subtitle, and watching motivational and psychological videos. This is in harmony with Cammarata's (2016) contention that mindfulness plays a key role in enhancing communicative skills via paying attention to details.

Reading skill (comprehension, cohesion, and coherence), vocabulary knowledge and grammar (collocations, formal and informal structures, dangling structure, adjective clauses, parts of speech, tenses, word order, and passive structure) were also found to be among the positive effects of mindfulness-based instruction (e.g., Clawson, 2019; Maynard et al., 2017).

Mindfulness helps individuals sustain their attention in the present rather than in the past and in the future (Kabat-Zinn, 1994) and fosters openness and acceptance so that their direct experience are not clouded by their preconceptions (Kabat-Zinn, 1990). This means that it increases their ability to deviate from automatic negative thinking, develops their cognitions, and promotes their cognitive flexibility (Frewen et al., 2008) to lead to broaden their perspectives (Langer, 1990). Deakin-Crick et al. (2015) stated that mindful agency exhibits a positive association with innovation, emotional attachment, and engagement. Hence, it can be said that such optimism and positive outlook replaces cynicism as one of "negative" dimensions of burnout. One line of justification for this finding could be based on the Langer's (1990) contention stating that mindful people avoid habitual actions, habitual negative thoughts, emotions and behavioural patterns.

Similarly, Ying (2008) showed that mindfulness minimizes the effect of one of "negative" dimensions (i.e. exhaustion), which is relevant to experiences in an academic settings among students. Since if individuals are emotionally exhausted, they feel emotionally worn-out and drained as a result of exposure to particular working conditions or stressors for a long period of time (Bakker et al., 2004) and of accumulated stress from their lives. According to Schaufeli et al. (2002), students experiencing emotional exhaustion feel burned out from their studies and feel like they could not control what happens in their lives meaning they feel like they got stuck. Therefore, the novelty seeking sub-construct of mindfulness helps them pay attention to what's going on around them (Langer, 2009), and be curious and open toward the environment and themselves (Pirson et al., 2012), leading to reducing stress, stimulating creativity, and boosting performance instead of operating on

autopilot (Langer, 2009) and then it alleviates or prevents symptoms of emotional exhaustion (Baena-Extremuera et al., 2021).

When mindfulness promotes awareness and acceptance, it disengages an individual from their automatic pilot, and allows for new ways to respond (Langer, 1990). In effect, its novelty producing sub-construct enables individuals create novel categories, with innovation and creativity, rather than relying on prior categorizations (Pirson et al., 2012). In addition, the flexibility sub-construct is the one which enables individuals to consider experiences from different perspectives and which results is better adaptation to the environment (Pirson et al., 2012). It is interesting to mention that the engagement sub-construct is the one which has the outlook toward an active interaction with the environment, when noticing bigger and subtler details and changes in social/environmental context (Pirson et al., 2012). Therefore, it implies that the mindful students with positive outlook are capable of concentrating on learning more attentively and enthusiastically in the class.

Overall, this study sought to decrease the EFL students' burnout with the use of mindfulness treatment. Based on the statistical results, the experimental groups experienced less burnout in comparison with the control groups. In other words, becoming interested in learning English, expressing feelings better, becoming motivated to learn beyond the class time, positive perceptions towards classroom activities, positive classroom environment and competition, positive method of instruction, positive attitudes towards speaking, self-satisfaction, positive self-concept, enhancing self-confidence and courage, not feeling tired and burnout, being eager to continue learning, and positive vision of the future position were among the effects of mindfulness on emotional exhaustion, cynicism, and academic inefficacy.

6. Pedagogical implications

The findings of the present study have important implications for teachers, educational policy-makers, and materials developers. They must acknowledge the idea that mindfulness training acts as a buffer for teachers that have great concerns about how they should teach in their classes. As such, educationalists and policy makers should adopt mindfulness-based interventions (MBIs) as a part of educational programming and inject mindfulness in the classroom so that students are equipped with abilities conducive to success during their academic endeavors and in their lives to become fully-functioning persons of the society. Moreover, materials developers can design textbooks and tasks based on mindfulness-based instruction to enhance students' burnout and help them learn in an appropriate classroom environment.

7. Conclusions

Taken together, the present study demonstrated the efficiency of mindfulness-based instruction in promoting various aspects of EFL learners' learning, including cognitive, metacognitive, and motivational dimensions. Indeed, mindfulness helps reduce stress levels and positively affects individuals' meta-cognition, executive functioning, focus and attention, academic achievement, social skills, range of knowledge in regards to emotions, emotion regulation skills, and self-efficacy resulting in standing up to unfavorable situations and scenarios (Albrecht, 2014; Burke, 2010; Carelse, 2013; Coholic, 2011). In the current study, it can be seen that one-minute motivational movies not only relieved students' stress and burnout, and provided positive energy, but also could empower students with positive and promising stance, and higher levels of creativity and originality in their writing and speaking. Such students are more likely to achieve a positive view on themselves, their English learning, their academic performance, and their engagement in learning, as they hope to continue studying English in the future in order to achieve a higher grade in an IELTS exam. Indeed, they see their academic achievement in the course based on the differences of scores at the beginning and at the end of the term. All in all, it can safely be concluded that mindfulness-based intervention has the potential to influence all aspects of learning, including cognitive, metacognitive, motivational, and emotional dimensions.

The present quasi-experimental study intended to explore the effect of mindfulness-based instruction on EFL students' burnout and language achievement in Mashhad, Iran, based on questionnaires and interviews. The study also offers some recommendations for future research. This study can be replicated in different ways. First, it can use a larger sample so that some other factors may be discovered and it can benefit from more generalizability. Second, it can be carried out in other cities in Iran or in other countries. Third, there is a need to replicate the study in the context of public schools creating the opportunity to compare and contrast the results with each other. It is also worthwhile to conduct a study on the effect of this type of instruction on other pertinent constructs.

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Appendices

Appendix A. Items of the Langer Mindfulness Scale (LMS)

Questionnaire 1		Strongly disagree	Disagree	Somewhat Disagree	Neither agree nor disagree	Somewhat Agree	Agree	Strongly agree
1	I like to investigate things.	1	2	3	4	5	6	7
2	I generate few novel ideas.	1	2	3	4	5	6	7
3	I make many novel contributions.	1	2	3	4	5	6	7
4	I seldom notice what other people are up to.	1	2	3	4	5	6	7
5	I avoid thought provoking conversations.	1	2	3	4	5	6	7
6	I am very creative.	1	2	3	4	5	6	7
7	I am very curious.	1	2	3	4	5	6	7
8	I try to think of new ways of doing things.	1	2	3	4	5	6	7
9	I am rarely aware of changes.	1	2	3	4	5	6	7
10	I like to be challenged intellectually.	1	2	3	4	5	6	7
11	I find it easy to create new and effective ideas.	1	2	3	4	5	6	7
12	I am rarely alert to new developments.	1	2	3	4	5	6	7
13	I like to figure out how things work.	1	2	3	4	5	6	7
14	I am not an original thinker.	1	2	3	4	5	6	7

Appendix B. Maslach-student burnout inventory

Questionnaire 2						
Directions: This questionnaire is designed to help us gain a better understanding of your views concerning teaching. Your answers are confidential. Please circle your respond to the items.		Never	Seldom	Sometimes	Often	Always
1	I feel emotionally drained by my studies.	1	2	3	4	5
2	I have become less interested in my studies since my enrollment at the school.	1	2	3	4	5
3	I can effectively solve the problems that arise in my studies.	1	2	3	4	5
4	I feel used up at the end of a day at school.	1	2	3	4	5
5	I have become less enthusiastic about my studies.	1	2	3	4	5
6	I believe that I make an effective contribution to the classes that I attend.	1	2	3	4	5
7	I feel burned out from my studies.	1	2	3	4	5
8	In my opinion, I am a good student.	1	2	3	4	5
9	I have learned many interesting things during the course of my studies.	1	2	3	4	5
10	I feel tired when I get up in the morning and I have to face another day at school.	1	2	3	4	5
11	I have become more cynical about the potential usefulness of my studies.	1	2	3	4	5
12	I feel stimulated when I achieve my study goals.	1	2	3	4	5
13	Studying or attending a class is really a strain for me.	1	2	3	4	5
14	I doubt the significance of my studies.	1	2	3	4	5
15	During class I feel confident that I am effective in getting things done.	1	2	3	4	5

List of Abbreviations

CARE: Cultivating Awareness and Resilience in Education

EFL: English as Foreign Language

IELTS: International English Language Testing System

LMS: Langer Mindfulness Scale

MBIs: Mindfulness-based interventions

MBI-SS: Maslach Burnout Inventory Student-Survey

SPSS: Statistical Package for the Social Sciences

SMART: Stress Management and Relaxation Techniques

UNICEF: United Nations International Child